

Determining Sampling Location

Both Level I and Level II Volunteer Lake Monitors will need to locate the deepest part of their lake in order to set a sampling site. You will return to this spot each time to measure Secchi depth and/or gather water samples. A depth contour map for your lake is available on the [Lakes Data and Descriptions page](#). This map identifies the deepest portion of your lake and will help you to establish the permanent sampling location. Follow the steps below to establish bearing lines that you can use to return to the same location each time.

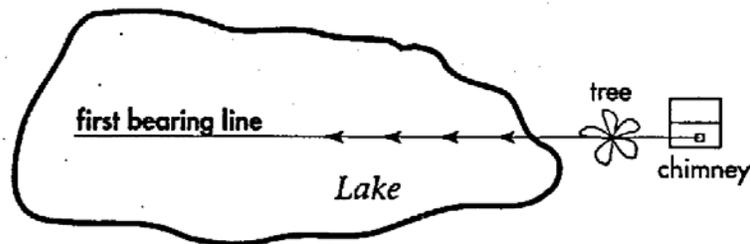
Position your boat in the sampling location shown on your lake map.

Before establishing your first bearing line, verify that you are close to the lake's deepest spot by measuring the length of line it takes to anchor your boat in this location. The depth should correspond closely to the maximum depth shown on your lake map.

If you find yourself at a depth significantly less than the depth shown for your sampling location, try repositioning your boat until you have located the deepest area. Let a Lake Stewardship Program staff person know if it is significantly different from what is shown on the map.

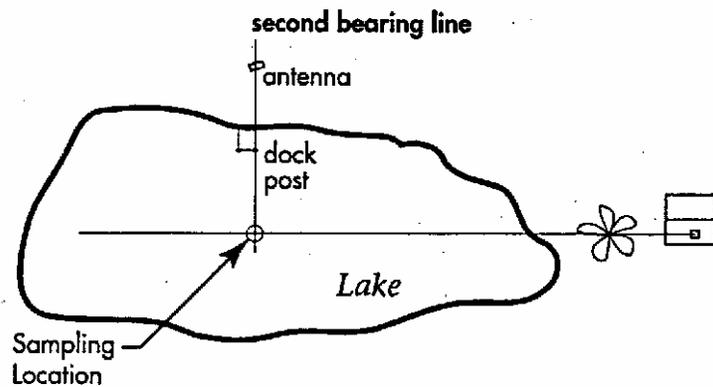
If you have a hand-held GPS device, create a waypoint and record the coordinates on your datasheet. If you don't have a GPS, establish visual markers of your site, by following the steps described below.

Establish the first bearing line by identifying two fixed objects on the shore (houses, chimneys, docks, trees, fence posts) to align with one another — one in the foreground and one in the background.



Once you have identified two objects, you may need to alter your position slightly on the lake to get them to line up. The line that is formed between you and the shoreline objects is your first bearing line.

To establish your second bearing line, you will need to examine the shoreline area that is as close as possible to a right angle (90 degrees) from your first bearing line. Again, find two objects that line up with one another.



The intersection of your two bearing lines should coincide with the deepest point in your lake and your permanent sampling location.

Write a description of the objects used for establishing the bearing lines onto the back of your datasheet so the Lake Stewardship Program has a record of it for future reference.

To get the most reliable data, use these same bearing lines each time you take a sample.

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